

1 **REMARKS**

Reconsideration of the application in view of the following remarks is respectfully requested.

Claims 1-39 are pending in this application. No Claims have been presently amended.

6 The office action states that Claims 1, 4-10, 17-24, 29, 32-33, 35-37 and 39 are rejected under Section 35 U.S.C. 102(e) as being anticipated by Leslie et al. (US 6559921 )

The office action also states that Claims 11-12,25-28,30-31 and 38 are rejected under Section 35 U.S.C. 103(a) as being unpatentable over Leslie et al. (US 6559921 )

Leslie et al. specify that that the waveguide switching element must have the following two extra critical features in order for the switching element to function:

11 A. The liquid crystal is in nematic phase both under zero and non-zero voltage (Col. 4 line 64 to Col. 5 line 16)

B. There are two alignment layers that align the liquid crystal in either homogeneous or homeotropic state under zero voltage (Col. 4 line 29 to Col. 4 line 51)

16 Applicant states that the electrodes as described in Leslie are not capable of in-plane switching.

Leslie et al explain that the switching elements, i.e., the trenches or canals can be used for polarization splitting, TE and TM switching, polarization combining, ....(Col. 5 line 17 to Col. 5 line 23). They further explicitly state that "LC switches are polarization dependent and thus, the TE and TM waves are handled separately (Col. 5 line 24 to Col. 5 line 25).

21 On the contrary, Claim 1 states "wherein a beam of light in any polarization propagating in the wave guide is not reflected when the beam of light in any polarization reaches the liquid crystal material in the first state, and wherein the beam of light in any polarization is reflected when the liquid crystal material is in the second state." Therefore, it becomes clear that our waveguide switching element switches not only polarized but also unpolarized light beam.

26 Since Leslie does not mention or suggest an element of each independent claim, Leslie does not anticipate any independent claims, those claims and their dependent claims are allowable under Section 35 U.S.C. 102(e). For the same reason, all claims are patentable under Section 35 U.S.C. 103(a) .

1

6 An extension of time from June 9, 2006 to July 9, 2006 for filing a reply in the above identified application is respectfully requested under 37 CFR 1.17. An additional fee of \$60 is required. The required fees and any insufficiency or overage (except issue fees) may be debited or credited to deposit account 08/2240.

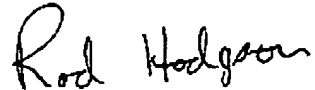
11 On the basis of the above amendments and remarks, reconsideration of this application and its early allowance is respectfully requested.

16 **CERTIFICATE OF FACSIMILE TRANSMISSION UNDER 37 CFR 1.8(a) and (b), 37CFR 1.86(f)-**

I hereby certify that the following attached correspondence comprising Response and Amendment is being sent by facsimile transmission to Commissioner of Patents, Alexandria, VA 22313-1450 FAX NUMBER 571-273-8300 on June 21, 2006

Respectfully,

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21